

Application No.: 10/594,161
Amendment Dated January 19, 2011
Reply to Office Action of October 25, 2010

MAT-8897US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appln. No: 10/594,161
Applicant: Tomohiro Murakoso et al.
Filed: October 26, 2006
Title: PLASMA DISPLAY PANEL
T.C./A.U.: 2889
Examiner: Elmito Breval
Confirmation No.: 6176
Docket No.: MAT-8897US

AMENDMENT UNDER 37 C.F.R. § 1.116**Expedited Procedure**

Mail Stop AF
Commissioner for Patents
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Alexandria, VA 22313-1450

Sir:

Responsive to the Final Office Action dated October 25, 2010, please amend the above-identified application as follows:

Amendments to the Specification begin on page _____ of this paper.

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Amendments to the Drawings begin on page _____ of this paper and include an attached replacement sheet(s).

Amendments to the Abstract are on page _____ of this paper. A clean version of the Abstract is on page _____ of this paper.

Remarks/Arguments begin on page 4 of this paper.

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A plasma display panel driven by plural subfields forming one field,

the subfields comprising:

a writing period during which writing discharging occurs in discharge cells to be displayed; and

a sustaining period during which sustain discharging occurs in the discharging cells in which the writing discharging occurs during the writing period,

the plasma display panel comprising:

a first substrate;

plural pairs of display electrodes, each pair consisting of a scanning electrode and a sustain electrode which are arranged parallel to each other on the first substrate;

a second substrate disposed opposite to the first substrate such that a discharge space is formed between the first substrate and the second substrate; and

plural data electrodes disposed on the second substrate in a direction perpendicular to the display electrodes, ~~at least one data electrode of the data electrodes~~ ~~the plural data electrodes~~ including a middle portion having a first constant width, opposite end portions having a second constant width, and respective tapered portions extending from the middle portion to each of the end portions,

wherein respective ones of the discharge cells include a phosphor operable to emit a blue color, a phosphor operable to emit a red color, or a phosphor operable to emit a green color, and

the opposite end portions of the data electrode corresponding to the respective one of the discharge cells including the phosphor operable to emit the blue color are wider than the opposite end portions of the data electrode corresponding to the respective one of the discharge cells including the phosphor operable to emit the red color.

2. (Cancelled)

3. (Currently Amended). The plasma display panel of ~~claim 2~~claim 1, wherein the data electrode ~~having the end portion wider than the central portion~~ increases in width continuously from the central portion of the second substrate toward the peripheral portion of the second substrate.

4. - 9. (Cancelled)

Remarks/Arguments:

Claims 1 and 3 are presently pending. Claims 2, 4, and 6-8 have been cancelled without prejudice or disclaimer. Claims 1 and 3 have been amended. Reconsideration is respectfully requested in view of the above amendments and the following remarks.

Claim Rejections Under 35 U.S.C. § 103

Page 2 of the Office Action sets forth "Claims 1-3, 6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uchida (JP: 2003-308783) of record in view of Nunomura (US. Pat: 6,479,932 B1) of record." Page 6 of the Office Action sets forth "Claims 4 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kwon et al., (US Pub: 2005/0052137) of record."

Applicants herein cancel claims 2, 4, and 6-8, thus obviating the rejection of these claims. Applicants respectfully submit that the remaining claims are allowable over the cited art for the reasons set forth below.

Applicants' invention, as recited by claim 1, includes features which are not disclosed, taught, or suggested by the cited art, namely:

...a second substrate...and...

...plural data electrodes disposed on the second substrate...the plural data electrodes including a middle portion having a first constant width, opposite end portions having a second constant width, and respective tapered portions extending from the middle portion to each of the end portions...

...wherein respective ones of the discharge cells include a phosphor operable to emit a blue color, a phosphor operable to emit a red color, or a phosphor operable to emit a green color, and...

...the opposite end portions of the data electrode corresponding to the respective one of the discharge cells including the phosphor operable to emit the blue color are wider than the opposite end portions of the data electrode corresponding to the respective one of the discharge cells including the phosphor operable to emit the red color.

This means that the data electrodes have tapered portions extending from a middle portion having a first constant width to end portions having a second constant width. The data

electrodes corresponding to blue discharge cells have wider end portions than the data electrodes corresponding to red discharge cells. This feature is found in the originally filed application at page 12, lines 14-23; page 17, lines 1-16; and FIG. 6. No new matter is added.

Applicants respectfully submit that the cited art fails to disclose at least the above features of claim 1.

Uchida is directed to a plasma display panel. As illustrated in FIGS. 1 and 3, for example, Uchida discloses a plasma display panel having a plurality of rear electrodes 1A and 1C. Rear electrodes 1A and 1C are wide at a top portion and narrow at a bottom portion. Rear electrodes 1C taper from a wide top portion to a narrow bottom portion. See Uchida at FIGS. 1 and 3.

Uchida fails to disclose that the rear electrodes 1A-1H corresponding to blue discharge cells have wider end portions than the rear electrodes 1A-1H corresponding to red discharge cells. This is different from claim 1, which requires that the data electrodes corresponding to blue discharge cells have wider end portions than the data electrodes corresponding to red discharge cells.

Applicants respectfully submit that Nunomura fails to make up for the deficiencies of Uchida with respect to claim 1.

Nunomura is also directed to a plasma display panel. As illustrated in FIG. 21, Nunomura discloses a plasma display panel having data electrodes 16. Data electrodes 16 have wide portions 33 and narrow portions 34. See Nunomura at column 13, lines 10-29, and FIG. 21.

Nunomura fails to disclose that the data electrodes 16 corresponding to blue discharge cells have wider end portions than the data electrodes 16 corresponding to red discharge cells. This is different from claim 1, which requires that the data electrodes corresponding to blue discharge cells have wider end portions than the data electrodes corresponding to red discharge cells.

Thus, Applicants respectfully submit that Uchida in view of Nunomura fails to disclose, teach, or suggest the features of "the opposite end portions of the data electrode corresponding to the respective one of the discharge cells including the phosphor operable to emit the blue color

are wider than the opposite end portions of the data electrode corresponding to the respective one of the discharge cells including the phosphor operable to emit the red color," as recited in claim 1.

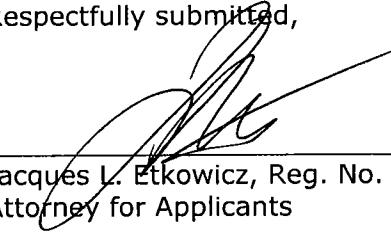
It is because Applicants' invention includes the above features that the following advantages are achieved. "Stable writing discharging is enabled over the whole display screen by forming data electrodes 10A, 10B, and 10C in this way even when discharge cells 15A, 15B, and 15C differ in width with different colors." See the originally filed application at page 17, lines 13-16.

Accordingly, for the reasons set forth above, claim 1 is allowable over the cited art. Withdrawal of the rejection and allowance of claim 1 is respectfully requested.

Claim 3 includes all of the features of claim 1, from which it depends. Thus, claim 3 is also allowable over the cited art for at least the reasons set forth above with respect to claim 1. Withdrawal of the rejection and allowance of claim 3 is respectfully requested.

In view of the amendments and arguments set forth above, the above-identified application is in condition for allowance, which action is respectfully requested.

Respectfully submitted,



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Dated: January 19, 2011

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